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         SEP 01
                 New pricing for the Save Answers for SciFinder Wizard within
                  STN Express with Discover!
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         NOV 30
                 PHAR reloaded with additional data
NEWS
         DEC 01
                 LISA now available on STN
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         DEC 09
                 12 databases to be removed from STN on December 31, 2004
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      8
         DEC 15
                 MEDLINE update schedule for December 2004
NEWS
         DEC 17
                  ELCOM reloaded; updating to resume; current-awareness
                  alerts (SDIs) affected
NEWS 10 DEC 17
                 COMPUAB reloaded; updating to resume; current-awareness
                  alerts (SDIs) affected
      11 DEC 17
                  SOLIDSTATE reloaded; updating to resume; current-awareness
NEWS
                  alerts (SDIs) affected
                 CERAB reloaded; updating to resume; current-awareness
NEWS
      12 DEC 17
                  alerts (SDIs) affected
                  THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB
      13 DEC 17
NEWS
                 EPFULL: New patent full text database to be available on STN
      14 DEC 30
NEWS
      15 DEC 30
                 CAPLUS - PATENT COVERAGE EXPANDED
NEWS
NEWS
      16 JAN 03
                 No connect-hour charges in EPFULL during January and
                  February 2005
                  CA/CAPLUS - Russian Agency for Patents and Trademarks
      17 FEB 25
NEWS
                  (ROSPATENT) added to list of core patent offices covered
      18 FEB 10
                  STN Patent Forums to be held in March 2005
NEWS
NEWS
      19 FEB 16
                  STN User Update to be held in conjunction with the 229th ACS
                  National Meeting on March 13, 2005
NEWS
      20 FEB 28
                  PATDPAFULL - New display fields provide for legal status
                  data from INPADOC
      21 FEB 28
                  BABS - Current-awareness alerts (SDIs) available
NEWS
      22 FEB 28
                 MEDLINE/LMEDLINE reloaded
NEWS
NEWS
      23 MAR 02
                  GBFULL: New full-text patent database on STN
NEWS
      24 MAR 03
                  REGISTRY/ZREGISTRY - Sequence annotations enhanced
      25 MAR 03
                 MEDLINE file segment of TOXCENTER reloaded
NEWS
NEWS EXPRESS
              JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT
               MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP),
               AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005
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FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

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                           55 56 57 58
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                                                      62
                                                          63
ring nodes :
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              6 7 8
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                                                         39 40 41 42
45 46 47
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6-55 17-52 23-48 30-61 41-58 48-49 49-50 50-51 51-64 52-53 53-54
56-57 58-59 59-60 61-62
                           62-63
ring bonds :
1-2 1-5 1-23 2-3
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                   45-46
                           46-64
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   8-11
exact bonds :
6-55 17-52 23-48 30-61 41-58 48-49 49-50 50-51 51-64 52-53 53-54
56-57 58-59 59-60 61-62 62-63
normalized bonds :
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               2-3
                    3-4
                        4-5 4-6 6-7 7-9 9-10 10-11 11-24 12-13 12-23
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                                                             35 - 64
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            27-28
37-38
      38-39 39-41 41-42 42-43 42-44
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                                                             46-64
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11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom
20:Atom 21:Atom 22:Atom
                         23:Atom 24:Atom 25:Atom 26:Atom 27:Atom
29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom
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47:Atom 48:CLASS 49:CLASS 50:CLASS 51:CLASS 52:CLASS 53:CLASS 54:CLASS
55:CLASS 56:CLASS 57:CLASS 58:CLASS 59:CLASS 60:CLASS 61:CLASS 62:CLASS
63:CLASS 64:Atom
L1
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L2
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FULL SEARCH INITIATED 11:47:09 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -
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100.0% PROCESSED
                    426 ITERATIONS
                                                            10 ANSWERS
SEARCH TIME: 00.00.01
L3
            10 SEA SSS FUL L1
=> d 13 1-10
L3
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RN
     694453-85-5 REGISTRY
CN
     Zinc, [5-(4-(10,20-dihepty)-15-(1-methy)-1H-imidazo]-2-y])-21H,23H-porphin-
     5-y1]-1, 3-butadiyny1]-10, 20-diheptyl-15-(1-methyl-1H-imidazol-2-y1)-
     21H, 23H-porphinato(2-)-\kappaN21, \kappaN22, \kappaN23, \kappaN24]-,
     (SP-4-2)-(9CI)
                    (CA INDEX NAME)
    C80 H88 N12 Zn
MF
CI
    CCS
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SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-88-1 REGISTRY

CN Zinc, [μ -[[tetra-2-propenyl 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphine-5,15-dipropanoato- κ N21, κ N22, κ N23, κ N24]](4-)]]di-, homopolymer (9CI) (CA INDEX NAME)

MF (C76 H62 N12 O8 Zn2)x

CI PMS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); PRP (Properties)

CM 1

CRN 679402-86-9

CMF C76 H62 N12 O8 Zn2

CCI CCS

PAGE 1-A

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 3 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-86-9 REGISTRY

CN Zinc, $[\mu-[[tetra-2-propenyl 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphine-5,15-dipropanoato-<math>\kappa$ N21, κ N22, κ N23, κ N24]](4-)]]di- (9CI) (CA INDEX NAME)

MF C76 H62 N12 O8 Zn2

CI CCS, COM

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

PAGE 1-A

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 4 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-83-6 REGISTRY

CN 21H,23H-Porphine-5,15-dipropanoic acid, 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-, tetra-2-propenyl ester (9CI) (CA INDEX NAME)

MF C76 H66 N12 O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

- CH= CH₂

- CH= CH₂

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 5 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-81-4 REGISTRY

CN 21H,23H-Porphine-5,15-dipropanoic acid, 10,10'-(1,3-butadiyne-1,4-diy1)bis[20-(1-methyl-1H-imidazol-2-yl)-, tetramethyl ester (9CI) (CA INDEX NAME)

MF C68 H58 N12 O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L3 ANSWER 6 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 629668-91-3 REGISTRY
- CN Zinc, $[\mu-[[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-methyl-1+-imidazol-2-yl)-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23,.kap pa.N24]](4-)]]bis(1-methyl-1H-imidazole- κ N3)di- (9CI) (CA INDEX NAME)

C88 H98 N16 Zn2 MF

CI CCS

SR CA

LCSTN Files: CA, CAPLUS

DT.CA CAplus document type: Journal RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

PAGE 1-A

PAGE 1-B

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 7 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN L3 RN 629668-90-2 REGISTRY Zinc, [5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-CN 5-y1]-1, 3-butadiyny1]-10, 20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-1021H, 23H-porphinato (2-) -κN21, κN22, κN23, κN24] (1methyl-1H-imidazole-κN3)-, (SP-5-13)- (9CI) (CA INDEX NAME) MF C84 H94 N14 Zn CI CCS SR CA STN Files: CA, CAPLUS LCDT.CA CAplus document type: Journal RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

ANSWER 8 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN L3 629668-87-7 REGISTRY RN 21H, 23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-CN methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME) OTHER NAMES: 1,4-Bis[15-(1-methyl-2-imidazolyl)-10,20-diheptylporphyrin-5-yl]-1,3-initial and the second control of the sCN butadiyne C80 H90 N12 MF SR CA CA, CAPLUS, CASREACT, USPATFULL LC STN Files:

DT.CA Caplus document type: Journal; Patent RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent) RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 9 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 629668-86-6 REGISTRY
- CN Zinc, $[\mu-[[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23,.kap pa.N24]](4-)]]di- (9CI) (CA INDEX NAME)
- MF C80 H86 N12 Zn2
- CI CCS
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL
- DT.CA CAplus document type: Journal; Patent
- RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
- RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L3 ANSWER 10 OF 10 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 629668-84-4 REGISTRY
- CN Zinc, bis[μ -[5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-5-yl]-1,3-butadiynyl]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl- κ N3)-21H,23H-porphinato(2-)- κ N21, κ N22, κ N23, κ N24]]di- (9CI) (CA INDEX NAME)
- MF C160 H176 N24 Zn2
- CI CCS
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL
- DT.CA CAplus document type: Journal; Patent
- RL.P Roles from patents: PREP (Preparation); PRP (Properties)

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

PAGE 1-A

PAGE 1-B

$$C = C - C = C$$

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PAGE 2-B

Me- (CH₂)₆

3 REFERENCES IN FILE CA (1907 TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 180.59 180.80

FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

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Uploading C:\Program Files\Stnexp\Queries\Application queries\10715493b.str

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Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 49:CLASS 50:CLASS 51:CLASS 52:Atom

L4 STRUCTURE UPLOADED

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L5 QUE L4

=> s 15 sss full FULL SEARCH INITIATED 11:48:55 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 426 TO ITERATE

100.0% PROCESSED 426 ITERATIONS 101 ANSWERS SEARCH TIME: 00.00.01

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=> file registry
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SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 162.19 342.99

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DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

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Match level :

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L7 STRUCTURE UPLOADED

=> que L7

L8 QUE L7

=> s 18 sss full

FULL SEARCH INITIATED 11:50:56 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 426 TO ITERATE

100.0% PROCESSED 426 ITERATIONS 15 ANSWERS

SEARCH TIME: 00.00.01

L9 15 SEA SSS FUL L7

=> d 19

L9 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 836627-44-2 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

MF C56 H40 N12 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> d 19 1-15

L9 ANSWER 1 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 836627-44-2 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

MF C56 H40 N12 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 2 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 836624-16-9 REGISTRY

CN 21H, 23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-dimethyl-15-(1-methyl-1H-imidazol-2-yl)-(9CI) (CA INDEX NAME)

MF C56 H42 N12

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 3 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 694453-85-5 REGISTRY

CN Zinc, [5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-5-yl]-1,3-butadiynyl]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphinato(2-)-κN21,κN22,κN23,κN24]-, (SP-4-2)- (9CI) (CA INDEX NAME)

MF C80 H88 N12 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 4 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-88-1 REGISTRY

CN Zinc, [μ -[[tetra-2-propenyl 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphine-5,15-dipropanoato- κ N21, κ N22, κ N23, κ N24]](4-)]]di-, homopolymer (9CI) (CA INDEX NAME)

MF (C76 H62 N12 O8 Zn2)x

CI PMS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); PRP (Properties)

CM 1

CRN 679402-86-9

CMF C76 H62 N12 O8 Zn2

CCI CCS

PAGE 1-A

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 5 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-86-9 REGISTRY

CN Zinc, [μ -[[tetra-2-propenyl 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphine-5,15-dipropanoato- κ N21, κ N22, κ N23, κ N24]](4-)]]di- (9CI) (CA INDEX NAME)

MF C76 H62 N12 O8 Zn2

CI CCS, COM

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

PAGE 1-A

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 6 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-83-6 REGISTRY

CN 21H,23H-Porphine-5,15-dipropanoic acid, 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-, tetra-2-propenyl ester (9CI) (CA INDEX NAME)

MF C76 H66 N12 O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

- CH= CH₂

- CH= CH₂

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 7 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-81-4 REGISTRY

CN 21H,23H-Porphine-5,15-dipropanoic acid, 10,10'-(1,3-butadiyne-1,4-diyl)bis(20-(1-methyl-1H-imidazol-2-yl)-, tetramethyl ester (9CI) (CA INDEX NAME)

MF C68 H58 N12 O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

- L9 ANSWER 8 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 629668-91-3 REGISTRY
- CN Zinc, $[\mu-[[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23,.kap pa.N24]](4-)]]bis(1-methyl-1H-imidazole- κ N3)di- (9CI) (CA INDEX NAME)

C88 H98 N16 Zn2 MF

CI CCS

CA SR

LC STN Files: CA, CAPLUS
DT.CA CAplus document type: Journal
RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

PAGE 1-A

PAGE 1-B

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 9 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 629668-90-2 REGISTRY

CN Zinc, $[5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-5-yl]-1,3-butadiynyl]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphinato(2-)-<math>\kappa$ N21, κ N22, κ N23, κ N24](1-methyl-1H-imidazole- κ N3)-, (SP-5-13)- (9CI) (CA INDEX NAME)

MF C84 H94 N14 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 10 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 629668-87-7 REGISTRY

CN 21H,23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)

OTHER NAMES:

CN 1,4-Bis[15-(1-methyl-2-imidazolyl)-10,20-diheptylporphyrin-5-yl]-1,3-butadiyne

MF C80 H90 N12

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L9 ANSWER 11 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 629668-86-6 REGISTRY
- CN Zinc, $[\mu-[[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23,.kap pa.N24]](4-)]]di- (9CI) (CA INDEX NAME)
- MF C80 H86 N12 Zn2
- CI CCS
- SR CA
- LC STN Files: CA, CAPLUS, CASREACT, USPATFULL
- DT.CA CAplus document type: Journal; Patent
- RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)
- RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L9 ANSWER 12 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN
- RN 629668-84-4 REGISTRY
- CN Zinc, bis[μ -[5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-5-yl]-1,3-butadiynyl]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl- κ N3)-21H,23H-porphinato(2-)- κ N21, κ N22, κ N23, κ N24]]di- (9CI) (CA INDEX NAME)
- MF C160 H176 N24 Zn2
- CI CCS
- SR CA
- LC STN Files: CA, CAPLUS, USPATFULL
- DT.CA CAplus document type: Journal; Patent
- RL.P Roles from patents: PREP (Preparation); PRP (Properties) .

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

PAGE 1-A

PAGE 1-B

PAGE 2-B

Me- (CH₂)₆

3 REFERENCES IN FILE CA (1907. TO DATE)
3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 13 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 202860-13-7 REGISTRY

CN Zinc, $[\mu-[[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,15,20-triethynyl-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23, κ N24]](4-)]]di- (9CI) (CA INDEX NAME)

MF C56 H22 N8 Zn2

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

HC
$$=$$
 C $=$ CH $=$ CH $=$ C $=$ CH $=$ CH

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 14 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 202860-12-6 REGISTRY

CN Zinc, $[5,10,15-triethynyl-20-[4-(10,15,20-triethynyl-21H,23H-porphin-5-yl)-1,3-butadiynyl]-21H,23H-porphinato(2-)-<math>\kappa$ N21, κ N22, κ N23,.k appa.N24]-, (SP-4-2)- (9CI) (CA INDEX NAME)

MF C56 H24 N8 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

$$C = CH$$
 $N = C$
 $N = C$

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L9 ANSWER 15 OF 15 REGISTRY COPYRIGHT 2005 ACS on STN

RN 202860-10-4 REGISTRY

CN 21H,23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,15,20-triethynyl-(9CI) (CA INDEX NAME)

MF C56 H26 N8

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

$$C = CH$$
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 $C = CH$
 $HC = C$
 $C = CH$
 $HC = C$
 $C = CH$
 $HC = C$
 $HC = C$

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)

2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 193.35 536.34

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 110

L10 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 836627-44-2 REGISTRY

CN INDEX NAME NOT YET ASSIGNED

MF C56 H40 N12 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 538.61

FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L10 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L11 1 836627-44-2/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 539.12

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:54:59 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

L12 1 L11

=> DIS L12 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L12 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1011874 CAPLUS

DN 142:206702

TI An insight into a novel class of self-assembled porphyrins: Geometric structure, electronic structure, one- and two-photon absorption properties

AU Zhou, Xin; Ren, Ai-Min; Feng, Ji-Kang

CS State Key Laboratory of Theoretical and Computational Chemistry Institute of Theoretical Chemistry, and College of Chemistry, Jilin University, Changchun, 130023, Peop. Rep. China

SO Chemistry--A European Journal (2004), 10(22), 5623-5631 CODEN: CEUJED; ISSN: 0947-6539

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

<---->User Break---->

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.90 542.02

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:57:39 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 836624-16-9

1 836624-16-9

(836624-16-9/RN)

=> d 113

THE ESTIMATED COST FOR THIS REQUEST IS 1.84 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L13 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN RN 836624-16-9 REGISTRY

CN 21H,23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-dimethyl-15-(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)

MF C56 H42 N12

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.70 544.72

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:58:44 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L13 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L14 1 836624-16-9/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 545.23

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:58:48 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L14

L15 1 L14

=> DIS L15 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L15 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:1011874 CAPLUS

DN 142:206702

TI An insight into a novel class of self-assembled porphyrins: Geometric structure, electronic structure, one- and two-photon absorption properties

AU Zhou, Xin; Ren, Ai-Min; Feng, Ji-Kang

CS State Key Laboratory of Theoretical and Computational Chemistry Institute of Theoretical Chemistry, and College of Chemistry, Jilin University, Changchun, 130023, Peop. Rep. China

SO Chemistry--A European Journal (2004), 10(22), 5623-5631 CODEN: CEUJED; ISSN: 0947-6539

PB Wiley-VCH Verlag GmbH & Co. KGaA

DT Journal

LA English

RE.CNT 40 THERE ARE 40 CITED REFERENCES AVAILABLE FOR THIS RECORD

ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 1.55 546.78

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 11:58:57 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY, JAPAN SCIENCE AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Mar 4, 2005 (20050304/UP).

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 546.84

0.06

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 11:59:06 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

547.29

0.45

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 11:59:15 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005, HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 694453-85-5

1 694453-85-5 L16

(694453-85-5/RN)

=> s 116

1 694453-85-5 L17

(694453-85-5/RN)

=> d 116

L16 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

694453-85-5 REGISTRY RN

Zinc, [5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-CN 5-y1]-1,3-butadiyny1]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H, 23H-porphinato (2-) - κ N21, κ N22, κ N23, κ N24]-, (SP-4-2) - (9CI) (CA INDEX NAME)

C80 H88 N12 Zn MF

CCS CI

CA SR

CA, CAPLUS, USPATFULL LC STN Files:

DT.CA CAplus document type: Patent

Roles from patents: PREP (Preparation); RACT (Reactant or reagent) RL.P

Me
$$CH_2$$
) 6 CH_2) 6

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE

TOTAL

FULL ESTIMATED COST

ENTRY SESSION 2.27 549.56

FILE 'REGISTRY' ENTERED AT 11:59:49 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L16 1 RN
- E1 THROUGH E1 ASSIGNED
- => S E1/RN

L18 1 694453-85-5/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.51
550.07

FILE 'USPATFULL' ENTERED AT 11:59:54 ON 09 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

USPAT2 is now available. USPATFULL contains full text of the <<< original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< <<< publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< >>> /PK, etc. <<<

<<<

>>> USPATFULL and USPAT2 can be accessed and searched together

```
>>> through the new cluster USPATALL. Type FILE USPATALL to
                                                                       <<<
>>> enter this cluster.
                                                                       <<<
>>>
                                                                       <<<
>>> Use USPATALL when searching terms such as patent assignees,
                                                                       <<<
>>> classifications, or claims, that may potentially change from
                                                                       <<<
>>> the earliest to the latest publication.
                                                                       <<<
This file contains CAS Registry Numbers for easy and accurate
substance identification.
=> S L18
             1 L18
L19
=> DIS L19 1
L19 ANSWER 1 OF 1 USPATFULL on STN
       2004:139611 USPATFULL
AN
ТT
       Porphyrin array exhibiting large two photon absorption property and
       including, as structural unit, bis(imidazolylporphyrin metal complex)
       linked with acetylenic bond and the derivative thereof, and method of
       producing the same
IN
       Kobuke, Yoshiaki, Ikoma-shi, JAPAN
       Ogawa, Kazuya, Ikoma-shi, JAPAN
       US 2004106787
                               20040603
PI
                         A1
      US 2003-715493
                          Α1
                               20031119 (10)
ΑI
       JP 2002-335246
                          20021119
PRAI
DT
      Utility
      APPLICATION
FS
LN.CNT 1205
INCL
      INCLM: 540/145.000
      NCLM: 540/145.000
NCL
IC
       [7]
       ICM: C07D487-22
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> file reigistry
'REIGISTRY' IS NOT A VALID FILE NAME
SESSION CONTINUES IN FILE 'USPATFULL'
Enter "HELP FILE NAMES" at an arrow prompt (=>) for a list of files
that are available. If you have requested multiple files, you can
specify a corrected file name or you can enter "IGNORE" to continue
accessing the remaining file names entered.
=> s 679402-88-1
L20
            0 679402-88-1
=> s 679402-88-1
             0 679402-88-1
L21
=> file registry
```

FILE 'REGISTRY' ENTERED AT 12:01:20 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

COST IN U.S. DOLLARS

FULL ESTIMATED COST

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

SINCE FILE

ENTRY

3.78

TOTAL

SESSION 553.85

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 122

L22 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-88-1 REGISTRY

CN Zinc, [μ -[[tetra-2-propenyl 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphine-5,15-dipropanoato- κ N21, κ N22, κ N23, κ N24]](4-)]]di-, homopolymer (9CI) (CA INDEX NAME)

MF (C76 H62 N12 O8 Zn2)x

CI PMS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); PRP (Properties)

CM 1

CRN 679402-86-9

CMF C76 H62 N12 O8 Zn2

CCI CCS

PAGE 1-A

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 556.12

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:01:54 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L22 1 RN
- E1 THROUGH E1 ASSIGNED
- => S E1/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 556.63

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 12:01:58 ON 09 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

USPAT2 is now available. USPATFULL contains full text of the <<< original, i.e., the earliest published granted patents or >>> <<< applications. USPAT2 contains full text of the latest US <<< publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> >>> published document but also a list of any subsequent <<< publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< are displayed in the PI (Patent Information) field of USPATFULL >>> <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< <<< /PK, etc. >>> <<< >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to <<< enter this cluster. >>> <<< >>> Use USPATALL when searching terms such as patent assignees, <<< >>> classifications, or claims, that may potentially change from <<< >>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L23

L24 2 L23

=> DIS L24 1

L24 ANSWER 1 OF 2 USPATFULL on STN

AN 2004:139611 USPATFULL

TI Porphyrin array exhibiting large two photon absorption property and including, as structural unit, bis(imidazolylporphyrin metal complex) linked with acetylenic bond and the derivative thereof, and method of producing the same

IN Kobuke, Yoshiaki, Ikoma-shi, JAPAN Ogawa, Kazuya, Ikoma-shi, JAPAN

PI US 2004106787 A1 20040603

AI US 2003-715493 A1 20031119 (10)

PRAI JP 2002-335246 20021119

DT Utility
FS APPLICATION

LN.CNT 1205

INCL INCLM: 540/145.000 NCL NCLM: 540/145.000

IC [7]

ICM: C07D487-22

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.38 559.01

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:02:45 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s v694453-85-5 L25 0 V694453-85-5

=> file registry COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL SESSION 5.03 564.04

FILE 'REGISTRY' ENTERED AT 12:03:10 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.

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Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more

information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 694453-85-5 L26 1 694453-85-5 (694453-85-5/RN)

=> d 126

L26 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN **694453-85-5** REGISTRY

CN Zinc, [5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-5-yl]-1,3-butadiynyl]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphinato(2-)-kN21,kN22,kN23,kN24]-, (SP-4-2)- (9CI) (CA INDEX NAME)

MF C80 H88 N12 Zn

CI CCS

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 566.31

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:03:44 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L26 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L27 1 694453-85-5/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 566.82

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 12:03:48 ON 09 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

>>>	USPAT2 is now available. USPATFULL contains full text of the	<<<
>>>	original, i.e., the earliest published granted patents or	<<<
>>>	applications. USPAT2 contains full text of the latest US	<<<
>>>	publications, starting in 2001, for the inventions covered in	<<<
>>>	USPATFULL. A USPATFULL record contains not only the original	<<<
>>>	published document but also a list of any subsequent	<<<
>>>	publications. The publication number, patent kind code, and	<<<
>>>	publication date for all the US publications for an invention	<<<
>>>	are displayed in the PI (Patent Information) field of USPATFULL	<<<
>>>	records and may be searched in standard search fields, e.g., /PN,	<<<
>>>	/PK, etc.	<<<
	·	
>>>	USPATFULL and USPAT2 can be accessed and searched together	<<<
>>>	through the new cluster USPATALL. Type FILE USPATALL to	<<<
>>>	enter this cluster.	<<<
>>>		<<<
>>>	Use USPATALL when searching terms such as patent assignees,	<<<
>>>	classifications, or claims, that may potentially change from	<<<
>>>	the earliest to the latest publication.	<<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L27

L28 1 L27

=> DIS L28 1

L28 ANSWER 1 OF 1 USPATFULL on STN

2004:139611 USPATFULL ΑN

Porphyrin array exhibiting large two photon absorption property and ΤI including, as structural unit, bis(imidazolylporphyrin metal complex) linked with acetylenic bond and the derivative thereof, and method of

producing the same

Kobuke, Yoshiaki, Ikoma-shi, JAPAN IN Ogawa, Kazuya, Ikoma-shi, JAPAN

PΙ US 2004106787 A1 20040603

20031119 (10) ΑT US 2003-715493 A1

PRAI JP 2002-335246 20021119

Utility DT

FS APPLICATION

LN.CNT 1205

INCLM: 540/145.000 INCL NCL NCLM: 540/145.000

IC [7]

ICM: C07D487-22

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> FIL REGISTRY

SINCE FILE TOTAL COST IN U.S. DOLLARS ENTRY SESSION 2.38 569.20 FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:04:02 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

7 MAR 2005 HIGHEST RN 844431-17-0 STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES:

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

DEL SEL Y

=> SEL L26 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L29 1 694453-85-5/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

569.71

0.51

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:04:06 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L29

L30 1 L29

=> DIS L30 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L30 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:451666 CAPLUS

DN 141:16270

TI Preparation of porphyrin arrays exhibiting large two photon absorption and including, as a structural unit, bis(imidazolylporphyrin metal complex) linked with an acetylenic bond and their derivatives

IN Kobuke, Yoshiaki; Ogawa, Kazuya

PA Japan

SO U.S. Pat. Appl. Publ., 35 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI US 2004106787 A1 20040603 US 2003-715493 20031119 JP 2004168690 A2 20040617 JP 2002-335246 20021119 PRAI JP 2002-335246 A 20021119 OS MARPAT 141:16270

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.00 571.71

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:05:13 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ${\tt ZIC/VINITI}$ data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 679402-86-9 L31 1 679402-86-9 (679402-86-9/RN)

=> d 131

L31 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN **679402-86-9** REGISTRY

CN Zinc, $[\mu-[[tetra-2-propeny], 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphine-5,15-dipropanoato- <math>\kappa$ N21, κ N22, κ N23, κ N24]](4-)]]di- (9CI) (CA INDEX NAME)

MF C76 H62 N12 O8 Zn2

CI CCS, COM

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

PAGE 1-B

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 573.98

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:05:55 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L31 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L32 1 679402-86-9/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.51
574.49

FILE 'USPATFULL' ENTERED AT 12:06:02 ON 09 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

>>>	USPAT2 is now available. USPATFULL contains full text of the	<<<
>>>	original, i.e., the earliest published granted patents or	<<<
>>>	applications. USPAT2 contains full text of the latest US	<<<
>>>	publications, starting in 2001, for the inventions covered in	<<<
>>>	USPATFULL. A USPATFULL record contains not only the original	<<<
>>>	published document but also a list of any subsequent	<<<
>>>	publications. The publication number, patent kind code, and	<<<
>>>	publication date for all the US publications for an invention	<<<
>>>	are displayed in the PI (Patent Information) field of USPATFULL	<<<
>>>	records and may be searched in standard search fields, e.g., /PN,	<<<
>>>	/PK, etc.	<<<
>>>	USPATFULL and USPAT2 can be accessed and searched together	<<<

>>> USPATFULL and USPAT2 can be accessed and searched together <>< >>> through the new cluster USPATALL. Type FILE USPATALL to <><

>>> enter this cluster. <<<

·>>

```
>>> Use USPATALL when searching terms such as patent assignees,
>>> classifications, or claims, that may potentially change from
                                                                         <<<
>>> the earliest to the latest publication.
                                                                         <<<
This file contains CAS Registry Numbers for easy and accurate
substance identification.
=> S L32
L33
             2 L32
=> DIS L33 1
L33 ANSWER 1 OF 2 USPATFULL on STN
       2004:139611 USPATFULL
AN
TТ
       Porphyrin array exhibiting large two photon absorption property and
       including, as structural unit, bis(imidazolylporphyrin metal complex)
       linked with acetylenic bond and the derivative thereof, and method of
       producing the same
       Kobuke, Yoshiaki, Ikoma-shi, JAPAN
IN
       Ogawa, Kazuya, Ikoma-shi, JAPAN
                          A1 20040603
       US 2004106787
PΙ
                          A1 . 20031119 (10)
       US 2003-715493
ΑI
       JP 2002-335246
                           20021119
PRAI
DT
       Utility
       APPLICATION
FS
LN.CNT 1205
       INCLM: 540/145.000
INCL
       NCLM: 540/145.000
NCL
IC
       ICM: C07D487-22
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> DIS L33 2
L33 ANSWER 2 OF 2 USPATFULL on STN
       2004:95533 USPATFULL
AN
       Covalently fixed porphyrin polymer having porphyrin metal complex
TΤ
       substituted with coordinating hetero aromatic ring as constituting unit
       thereof, and method of producing the same
       Kobuke, Yoshiaki, Ikoma-shi, JAPAN
Satake, Akiharu, Ikoma-shi, JAPAN
IN
                                20040415
PT
       US 2004072988
                         A1
       US 2003-419767
                         A1
                                20030422 (10)
ΑI
       JP 2002-281616
                           20020926
PRAI
DT
       Utility
       APPLICATION
FS
LN.CNT 2303
       INCLM: 528/395.000
INCL
       NCLM: 528/395.000
NCL
IC
       [7]
       ICM: C08G079-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> file registry
COST IN U.S. DOLLARS
                                                  SINCE FILE
                                                                   TOTAL
                                                       ENTRY
                                                                 SESSION
                                                        8.94
                                                                  583.43
FULL ESTIMATED COST
FILE 'REGISTRY' ENTERED AT 12:09:03 ON 09 MAR 2005
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
```

PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 134

L34 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN **679402-83-6** REGISTRY

CN 21H,23H-Porphine-5,15-dipropanoic acid, 10,10'-(1,3-butadiyne-1,4-diyl)bis[20-(1-methyl-1H-imidazol-2-yl)-, tetra-2-propenyl ester (9CI) (CA INDEX NAME)

MF C76 H66 N12 O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL

DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

- CH= CH₂

-- CH=- CH₂

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 585.70

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:09:21 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L34 1 RN
- E1 THROUGH E1 ASSIGNED

L35 1 679402-83-6/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 586.21

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 12:09:26 ON 09 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

>>> USPAT2 is now available. USPATFULL contains full text of the <<< >>> original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< <<< >>> /PK, etc. >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to <<< <<< >>> enter this cluster. >>> <<< <<< >>> Use USPATALL when searching terms such as patent assignees, <<< >>> classifications, or claims, that may potentially change from >>> the earliest to the latest publication. <<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L35

L36 2 L35

=> DIS L36 1

L36 ANSWER 1 OF 2 USPATFULL on STN

AN 2004:139611 USPATFULL

Porphyrin array exhibiting large two photon absorption property and including, as structural unit, bis(imidazolylporphyrin metal complex) linked with acetylenic bond and the derivative thereof, and method of producing the same

IN Kobuke, Yoshiaki, Ikoma-shi, JAPAN Ogawa, Kazuya, Ikoma-shi, JAPAN PI US 2004106787 A1 20040603 AI US 2003-715493 A1 20031119 (10)

PRAI JP 2002-335246 20021119

DT Utility FS APPLICATION

LN.CNT 1205

INCL INCLM: 540/145.000 NCL NCLM: 540/145.000

IC [7]

ICM: C07D487-22

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> DIS L36 2

L36 ANSWER 2 OF 2 USPATFULL on STN

AN 2004:95533 USPATFULL

Covalently fixed porphyrin polymer having porphyrin metal complex substituted with coordinating hetero aromatic ring as constituting unit thereof, and method of producing the same

IN Kobuke, Yoshiaki, Ikoma-shi, JAPAN Satake, Akiharu, Ikoma-shi, JAPAN PI US 2004072988 Al 20040415 AI US 2003-419767 Al 20030422 (10)

PRAI JP 2002-281616 20020926

DT Utility
FS APPLICATION

LN.CNT 2303

INCL INCLM: 528/395.000 NCL NCLM: 528/395.000

IC [7]

ICM: C08G079-00

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
4.74 590.95

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:10:25 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting ${\tt SmartSELECT}$ searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FILE 'REGISTRY' ENTERED AT 12:10:40 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 138

L38 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 679402-81-4 REGISTRY

CN 21H,23H-Porphine-5,15-dipropanoic acid, 10,10'-(1,3-butadiyne-1,4-diyl)bis(20-(1-methyl-1H-imidazol-2-yl)-, tetramethyl ester (9CI) (CA INDEX NAME)

MF C68 H58 N12 O8

SR CA

LC STN Files: CA, CAPLUS, USPATFULL DT.CA CAplus document type: Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

- 2 REFERENCES IN FILE CA (1907 TO DATE)
- 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 593.65

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:11:05 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L38 1 RN
- E1 THROUGH E1 ASSIGNED
- => S E1/RN

L39 1 679402-81-4/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

594.16

0.51

FULL ESTIMATED COST

FILE 'USPATFULL' ENTERED AT 12:11:11 ON 09 MAR 2005 CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD) FILE LAST UPDATED: 8 Mar 2005 (20050308/ED) HIGHEST GRANTED PATENT NUMBER: US6865747

HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

```
>>> USPAT2 is now available. USPATFULL contains full text of the
                                                                      <<<
                                                                      <<<
>>> original, i.e., the earliest published granted patents or
>>> applications. USPAT2 contains full text of the latest US
                                                                      <<<
                                                                      <<<
>>> publications, starting in 2001, for the inventions covered in
>>> USPATFULL. A USPATFULL record contains not only the original
                                                                      <<<
                                                                       <<<
>>> published document but also a list of any subsequent
                                                                       <<<
>>> publications. The publication number, patent kind code, and
>>> publication date for all the US publications for an invention
                                                                       <<<
>>> are displayed in the PI (Patent Information) field of USPATFULL
                                                                       <<<
>>> records and may be searched in standard search fields, e.g., /PN, <<<
>>> /PK, etc.
                                                                       <<<
>>> USPATFULL and USPAT2 can be accessed and searched together
>>> through the new cluster USPATALL. Type FILE USPATALL to
                                                                       <<<
                                                                       <<<
>>> enter this cluster.
                                                                       <<<
>>>
                                                                       <<<
>>> Use USPATALL when searching terms such as patent assignees,
>>> classifications, or claims, that may potentially change from
                                                                      <<<
>>> the earliest to the latest publication.
                                                                      <<<
```

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L39

L40 2 L39

=> DIS L40 1

L40 ANSWER 1 OF 2 USPATFULL on STN ΑN 2004:139611 USPATFULL ΤI Porphyrin array exhibiting large two photon absorption property and including, as structural unit, bis(imidazolylporphyrin metal complex) linked with acetylenic bond and the derivative thereof, and method of producing the same IN Kobuke, Yoshiaki, Ikoma-shi, JAPAN Ogawa, Kazuya, Ikoma-shi, JAPAN US 2004106787 PIA1 20040603 AΤ US 2003-715493 A1 20031119 (10) PRAI JP 2002-335246 20021119 DT Utility FS APPLICATION LN.CNT 1205 INCLM: 540/145.000 INCL NCL NCLM: 540/145.000 IC [7] ICM: C07D487-22 CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> DIS L40 2

L40 ANSWER 2 OF 2 USPATFULL on STN AN 2004:95533 USPATFULL TI Covalently fixed porphyrin pol

TI Covalently fixed porphyrin polymer having porphyrin metal complex substituted with coordinating hetero aromatic ring as constituting unit thereof, and method of producing the same

IN Kobuke, Yoshiaki, Ikoma-shi, JAPAN Satake, Akiharu, Ikoma-shi, JAPAN

```
PΙ
       US 2004072988
                          A1
                                20040415
ΑI
       US 2003-419767
                          A1
                                20030422 (10)
PRAI
       JP 2002-281616
                           20020926
DΤ
       Utility
       APPLICATION
FS
LN.CNT 2303
INCL
       INCLM: 528/395.000
       NCLM: 528/395.000
NCL.
       [7]
IC
       ICM: C08G079-00
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
=> file registry
COST IN U.S. DOLLARS
                                                  SINCE FILE
                                                                   TOTAL.
                                                       ENTRY
                                                                 SESSION
FULL ESTIMATED COST
                                                                  597.50
                                                        3.34
FILE 'REGISTRY' ENTERED AT 12:11:41 ON 09 MAR 2005
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STRUCTURE FILE UPDATES:
                            7 MAR 2005 HIGHEST RN 844431-17-0
DICTIONARY FILE UPDATES:
                           7 MAR 2005 HIGHEST RN 844431-17-0
TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005
  Please note that search-term pricing does apply when
  conducting SmartSELECT searches.
Crossover limits have been increased. See HELP CROSSOVER for details.
Experimental and calculated property data are now available. For more
information enter HELP PROP at an arrow prompt in the file or refer
to the file summary sheet on the web at:
http://www.cas.org/ONLINE/DBSS/registryss.html
=> s 629668-91-3
             1 629668-91-3
                 (629668-91-3/RN)
=> d 141
L41 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN
     629668-91-3 REGISTRY
RN
     Zinc, [\mu-[5,5'-(1,3-butadiyne-1,4-diyl)] bis [10,20-diheptyl-15-(1-methyl-
CN
     1H-imidazol-2-yl)-21H, 23H-porphinato-\kappaN21, \kappaN22, \kappaN23, . kap
     pa.N24]](4-)]]bis(1-methyl-1H-imidazole-\kappaN3)di- (9CI) (CA INDEX
     NAME)
     C88 H98 N16 Zn2
MF
CI
     CCS
SR
     CA
     STN Files:
                  CA, CAPLUS
DT.CA CAplus document type: Journal
```

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

PAGE 1-B

PAGE 2-A

- 2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 599.77

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:11:59 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L41 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L42 1 629668-91-3/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 600.28

FULL ESTIMATED COST

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L42

L43 2 L42

=> DIS L43 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):Y THE ESTIMATED COST FOR THIS REQUEST IS 2.20 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

- L43 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2004:164564 CAPLUS
- DN 141:306273
- TI Strong two-photon absorption of self-assembled butadiyne-linked bisporphyrin. [Erratum to document cited in CA140:022308]
- AU Ogawa, Kazuya; Ohashi, Atsushi; Kobuke, Yoshiaki; Kamada, Kenji; Ohta, Koji
- CS Graduate School of Materials Science, Nara Institute of Science and Technology, Ikoma, Nara, 630-0101, Japan
- SO Journal of the American Chemical Society (2004), 126(12), 4050 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal
- LA English
- L43 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:797108 CAPLUS
- DN 140:22308
- TI Strong Two-Photon Absorption of Self-Assembled Butadiyne-Linked Bisporphyrin
- AU Ogawa, Kazuya; Ohashi, Atsushi; Kobuke, Yoshiaki; Kamada, Kenji; Ohta, Koji
- CS Graduate School of Materials Science, Nara Institute of Science and Technology, Ikoma, Nara, 630-0101, Japan
- SO Journal of the American Chemical Society (2003), 125(44), 13356-13357 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 140:22308
- RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
2.65 602.93

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 12:12:29 ON 09 MAR 2005
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AND TECHNOLOGY CORPORATION, AND FACHINFORMATIONSZENTRUM KARLSRUHE

FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 4, 2005 (20050304/UP).

=> FIL CAPLUS COST IN U.S. DOLLARS

SINCE FILE TOTAL SESSION 0.12 603.05

FULL ESTIMATED COST
FILE 'CAPLUS' ENTERED AT 12:13:45

FILE 'CAPLUS' ENTERED AT 12:13:45 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

⇒ file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.45 603.50

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:13:51 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> s 629668-90-2 L44 1 629668-90-2 (629668-90-2/RN)

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN 629668-90-2 REGISTRY RN Zinc, [5-[4-[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-21H,23H-porphin-CN 5-y1]-1,3-butadiynyl]-10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)-121H, 23H-porphinato(2-)-kN21, kN22, kN23, kN24](1methyl-1H-imidazole-κN3)-, (SP-5-13)- (9CI) (CA INDEX NAME) MF C84 H94 N14 Zn CI CCS SR CA LC CA, CAPLUS STN Files: DT.CA CAplus document type: Journal RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties)

Me
$$(CH_2) 6-Me$$

Me
 $(CH_2) 6-Me$

Me
 $(CH_2) 6$

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
2.27
605.77

FILE 'REGISTRY' ENTERED AT 12:14:13 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L44 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L45 1 629668-90-2/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 606.28

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:14:18 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L45

L46 2 L45

=> DIS L46 1-

YOU HAVE REQUESTED DATA FROM 2 ANSWERS - CONTINUE? Y/(N):Y THE ESTIMATED COST FOR THIS REQUEST IS 2.20 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L46 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN AN 2004:164564 CAPLUS DN 141:306273

- Strong two-photon absorption of self-assembled butadiyne-linked TI bisporphyrin. [Erratum to document cited in CA140:022308]
- Ogawa, Kazuya; Ohashi, Atsushi; Kobuke, Yoshiaki; Kamada, Kenji; Ohta, ΑU Koji
- CS Graduate School of Materials Science, Nara Institute of Science and Technology, Ikoma, Nara, 630-0101, Japan
- Journal of the American Chemical Society (2004), 126(12), 4050 SO CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DTJournal
- English LA
- L46 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN
- 2003:797108 CAPLUS AN
- DN 140:22308
- Strong Two-Photon Absorption of Self-Assembled Butadiyne-Linked ΤI Bisporphyrin
- Ogawa, Kazuya; Ohashi, Atsushi; Kobuke, Yoshiaki; Kamada, Kenji; Ohta, ΑU Koji
- CS Graduate School of Materials Science, Nara Institute of Science and Technology, Ikoma, Nara, 630-0101, Japan
- Journal of the American Chemical Society (2003), 125(44), 13356-13357 SO CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DTJournal
- English LA
- CASREACT 140:22308 OS
- THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 45 ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE

COST IN U.S. DOLLARS

SINCE FILE TOTAL. ENTRY SESSION 2.65 608.93

FULL ESTIMATED COST

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FILE CONTAINS CURRENT INFORMATION. LAST RELOADED: Mar 4, 2005 (20050304/UP).

=> FIL CAPLUS

COST IN U.S. DOLLARS SINCE FILE TOTAL ENTRY SESSION FULL ESTIMATED COST 0.06 608.99

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.45 609.44

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 147

L47 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN **629668-87-7** REGISTRY

CN 21H,23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,20-diheptyl-15-(1-methyl-1H-imidazol-2-yl)- (9CI) (CA INDEX NAME)
OTHER NAMES:

CN 1,4-Bis[15-(1-methyl-2-imidazolyl)-10,20-diheptylporphyrin-5-yl]-1,3-butadiyne

MF C80 H90 N12

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: PREP (Preparation); RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); PRP (Properties); RACT (Reactant or reagent)

- 3 REFERENCES IN FILE CA (1907 TO DATE)
- 3 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 611.71

FULL ESTIMATED COST

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L47 1 RN
- E1 THROUGH E1 ASSIGNED
- => S E1/RN

L48 1 629668-87-7/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST 0.51 612.22

FILE 'USPATFULL' ENTERED AT 12:15:39 ON 09 MAR 2005
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FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

>>> USPAT2 is now available. USPATFULL contains full text of the <<< >>> original, i.e., the earliest published granted patents or <<< >>> applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< >>> /PK, etc. <<< >>> USPATFULL and USPAT2 can be accessed and searched together <<< >>> through the new cluster USPATALL. Type FILE USPATALL to <<< >>> enter this cluster. <<< <<< >>> >>> Use USPATALL when searching terms such as patent assignees, <<< >>> classifications, or claims, that may potentially change from <<<

<<<

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L48

L49 1 L48

=> DIS L49 1

L49 ANSWER 1 OF 1 USPATFULL on STN

AN 2004:139611 USPATFULL

Porphyrin array exhibiting large two photon absorption property and including, as structural unit, bis(imidazolylporphyrin metal complex) linked with acetylenic bond and the derivative thereof, and method of producing the same

IN Kobuke, Yoshiaki, Ikoma-shi, JAPAN

>>> the earliest to the latest publication.

Ogawa, Kazuya, Ikoma-shi, JAPAN

PI US 2004106787 A1 20040603

AI US 2003-715493 A1 20031119 (10)

PRAI JP 2002-335246 20021119

DT Utility

FS APPLICATION

LN.CNT 1205

INCL INCLM: 540/145.000 NCL NCLM: 540/145.000 IC [7]

ICM: C07D487-22

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.38 614.60

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:15:57 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L47 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L50 1 629668-87-7/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CASREACT

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 615.11

FULL ESTIMATED COST

FILE 'CASREACT' ENTERED AT 12:16:02 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR CUSTOMER AGREEMENT COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE CONTENT: 1840 - 6 Mar 2005 VOL 142 ISS 10

Some CASREACT records are derived from the ZIC/VINITI database (1974-1991) provided by InfoChem, INPI data prior to 1986, and Biotransformations database compiled under the direction of Professor Dr. Klaus Kieslich.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L50

L51 1 L50

=> DIS L51 1

THE ESTIMATED COST FOR THIS REQUEST IS 2.67 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L51 ANSWER 1 OF 1 CASREACT COPYRIGHT 2005 ACS on STN

HC=C
$$(CH_2)_6$$
-Me

N

1. 02, Pyridine

2. CuCl

3. CHCl3

4. TsOH

(CH₂)₆-Me

(step 1)

15%

REF: Journal of the American Chemical Society, 125(44), 13356-13357; 2003

NOTE: key step

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 30.35 645.46

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:16:41 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L47 1 RN
- E1 THROUGH E1 ASSIGNED
- => S E1/RN

L52 1 629668-87-7/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 645.97

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:16:45 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L52

L53 3 L52

=> DIS L53 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L53 ANSWER 1 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:451666 CAPLUS

DN 141:16270

TI Preparation of porphyrin arrays exhibiting large two photon absorption and including, as a structural unit, bis(imidazolylporphyrin metal complex) linked with an acetylenic bond and their derivatives

IN Kobuke, Yoshiaki; Ogawa, Kazuya

PA Japan

SO U.S. Pat. Appl. Publ., 35 pp. CODEN: USXXCO

DT Patent

LA English

FAN.CNT 1

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
PI US 2004106787	A1	20040603	US 2003-715493	20031119
JP 2004168690	A2	20040617	JP 2002-335246	20021119
PRAI JP 2002-335246	Α	20021119		
OS MARPAT 141:16270				

=> DIS L53 2

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L53 ANSWER 2 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN

AN 2004:164564 CAPLUS

DN 141:306273

TI Strong two-photon absorption of self-assembled butadiyne-linked bisporphyrin. [Erratum to document cited in CA140:022308]

AU Ogawa, Kazuya; Ohashi, Atsushi; Kobuke, Yoshiaki; Kamada, Kenji; Ohta, Koji

CS Graduate School of Materials Science, Nara Institute of Science and Technology, Ikoma, Nara, 630-0101, Japan

SO Journal of the American Chemical Society (2004), 126(12), 4050 CODEN: JACSAT; ISSN: 0002-7863

PB American Chemical Society

DT Journal

LA English

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.65 648.62

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 12:17:18 ON 09 MAR 2005
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 4, 2005 (20050304/UP).

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.12 648.74

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:18:40 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> DIS L53 3

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

- L53 ANSWER 3 OF 3 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2003:797108 CAPLUS
- DN 140:22308
- TI Strong Two-Photon Absorption of Self-Assembled Butadiyne-Linked Bisporphyrin
- AU Ogawa, Kazuya; Ohashi, Atsushi; Kobuke, Yoshiaki; Kamada, Kenji; Ohta, Koji
- CS Graduate School of Materials Science, Nara Institute of Science and Technology, Ikoma, Nara, 630-0101, Japan
- SO Journal of the American Chemical Society (2003), 125(44), 13356-13357 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 140:22308
- RE.CNT 45 THERE ARE 45 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

ENTRY SESSION 1.55 650.29

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:18:59 ON 09 MAR 2005
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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> file registry
COST IN U.S. DOLLARS

SINCE FILE TOTAL
ENTRY SESSION
0.86 651.15

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:20:28 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 155

L55 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN

RN 202860-13-7 REGISTRY

CN Zinc, $[\mu-[[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,15,20-triethynyl-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23, κ N24]](4-)]]di- (9CI)

(CA INDEX NAME)

MF C56 H22 N8 Zn2

CI CCS

SR CA

LC STN Files: CA, CAPLUS

DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PRP (Properties)

- 1 REFERENCES IN FILE CA (1907 TO DATE)
- 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.27 653.42

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:21:04 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L55 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L56 1 202860-13-7/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 653.93

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:21:08 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L56

L57 1 L56

=> DIS L57 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:Y

- L57 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 1998:33809 CAPLUS
- DN 128:167041
- TI DFT study of alkynylporphyrin dimers and brominated tetraphenylporphyrins
- AU Wang, Zhiqiang; Day, Paul; Pachter, Ruth; Mclean, Daniel G.
- CS Materials Directorate, Wright Laboratory, WL/MLPJ Wright-Patterson Air Force Base, OH, 45433-7702, USA
- SO Materials Research Society Symposium Proceedings (1997), 479 (Materials for Optical Limiting II), 331-336
 CODEN: MRSPDH; ISSN: 0272-9172
- PB Materials Research Society
- DT Journal
- LA English

RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> FIL STNGUIDE COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 1.55 655.48

FULL ESTIMATED COST

FILE 'STNGUIDE' ENTERED AT 12:21:19 ON 09 MAR 2005
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FILE CONTAINS CURRENT INFORMATION.
LAST RELOADED: Mar 4, 2005 (20050304/UP).

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.06 655.54

FULL ESTIMATED COST

FILE 'CAPLUS' ENTERED AT 12:22:02 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.45 655.99

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 12:22:15 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> d 158

ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN L58 202860-13-7 REGISTRY RN Zinc, $[\mu-[5,5'-(1,3-butadiyne-1,4-diyl)bis[10,15,20-triethynyl-21H,23H-$ CN porphinato- κ N21, κ N22, κ N23, κ N24]](4-)]]di- (9CI) (CA INDEX NAME) MF C56 H22 N8 Zn2 CCS CI CA SR STN Files: CA, CAPLUS LC

DT.CA CAplus document type: Journal RL.NP Roles from non-patents: PRP (Properties)

HC
$$=$$
 C $=$ CH $=$ CH $=$ C $=$ CH $=$ CH

1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
2.27 658.26

FILE 'REGISTRY' ENTERED AT 12:22:35 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

Please note that search-term pricing does apply when conducting SmartSELECT searches.

Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L58 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L59 1 202860-13-7/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 658.77

FULL ESTIMATED COST

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

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=> S L59

L60 1 L59

=> DIS L60 1
THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS

DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:Y

STN Files:

LC

CA, CAPLUS

RL.NP Roles from non-patents: PRP (Properties)

DT.CA CAplus document type: Journal

L60 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN 1998:33809 CAPLUS AN 128:167041 DN DFT study of alkynylporphyrin dimers and brominated tetraphenylporphyrins ΤI Wang, Zhiqiang; Day, Paul; Pachter, Ruth; Mclean, Daniel G. AU Materials Directorate, Wright Laboratory, WL/MLPJ Wright-Patterson Air CS Force Base, OH, 45433-7702, USA Materials Research Society Symposium Proceedings (1997), 479 (Materials for SO Optical Limiting II), 331-336 CODEN: MRSPDH; ISSN: 0272-9172 Materials Research Society PB Journal DTEnglish LATHERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD RE.CNT 16 ALL CITATIONS AVAILABLE IN THE RE FORMAT => file registry TOTAL SINCE FILE COST IN U.S. DOLLARS SESSION ENTRY 661.67 FULL ESTIMATED COST 2.90 FILE 'REGISTRY' ENTERED AT 12:24:58 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS) Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem. STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005 Please note that search-term pricing does apply when conducting SmartSELECT searches. Crossover limits have been increased. See HELP CROSSOVER for details. Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html => s 202860-10-4 1 202860-10-4 L61 (202860-10-4/RN) => d 161L61 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2005 ACS on STN 202860-10-4 REGISTRY RN 21H, 23H-Porphine, 5,5'-(1,3-butadiyne-1,4-diyl)bis[10,15,20-triethynyl-CN (9CI) (CA INDEX NAME) MF C56 H26 N8 SR CA

$$C = CH$$
 $HC = C$
 NH
 NH

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> FIL REGISTRY

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
2.27 663.94

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STRUCTURE FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0 DICTIONARY FILE UPDATES: 7 MAR 2005 HIGHEST RN 844431-17-0

TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L61 1 RN
- E1 THROUGH E1 ASSIGNED
- => S E1/RN

L62 1 202860-10-4/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 664.45

FULL ESTIMATED COST

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L62

L63 2 L62

=> DIS L63 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

L63 ANSWER 1 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:49485 CAPLUS

DN 128:204480

TI Density functional theory studies of meso-alkynyl porphyrins

AU Wang, Zhiqiang; Day, Paul N.; Pachter, Ruth

CS Materials and Manufacturing Directorate, Air Force Research Laboratory, AFRL/MLPJ, Wright-Patterson Air Force Base, OH, 45433-7702, USA

SO Journal of Chemical Physics (1998), 108(6), 2504-2510 CODEN: JCPSA6; ISSN: 0021-9606

PB American Institute of Physics

DT Journal

LA English

RE.CNT 32 THERE ARE 32 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> DIS L63 2

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y) /N:Y

L63 ANSWER 2 OF 2 CAPLUS COPYRIGHT 2005 ACS on STN

AN 1998:33809 CAPLUS

DN 128:167041

- TI DFT study of alkynylporphyrin dimers and brominated tetraphenylporphyrins
- AU Wang, Zhiqiang; Day, Paul; Pachter, Ruth; Mclean, Daniel G.
- CS Materials Directorate, Wright Laboratory, WL/MLPJ Wright-Patterson Air Force Base, OH, 45433-7702, USA
- SO Materials Research Society Symposium Proceedings (1997), 479 (Materials for Optical Limiting II), 331-336 CODEN: MRSPDH; ISSN: 0272-9172
- PB Materials Research Society
- DT Journal
- LA English
- RE.CNT 16 THERE ARE 16 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> end

ALL L# QUERIES AND ANSWER SETS ARE DELETED AT LOGOFF

LOGOFF? (Y)/N/HOLD:y

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST 3.10 667.55

STN INTERNATIONAL LOGOFF AT 12:26:33 ON 09 MAR 2005

Connecting via Winsock to STN

Welcome to STN International! Enter x:x

LOGINID:sssptamlf1623

PASSWORD:

TERMINAL (ENTER 1, 2, 3, OR ?):2

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NEWS 2 "Ask CAS" for self-help around the clock

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NEWS 4 OCT 28 KOREAPAT now available on STN

NEWS 5 NOV 30 PHAR reloaded with additional data

NEWS 6 DEC 01 LISA now available on STN

NEWS $\,$ 7 DEC 09 $\,$ 12 databases to be removed from STN on December 31, 2004

NEWS 8 DEC 15 MEDLINE update schedule for December 2004

NEWS 9 DEC 17 ELCOM reloaded; updating to resume; current-awareness alerts (SDIs) affected

NEWS 10 DEC 17 COMPUAB reloaded; updating to resume; current-awareness alerts (SDIs) affected

NEWS 11 DEC 17 SOLIDSTATE reloaded; updating to resume; current-awareness alerts (SDIs) affected

NEWS 12 DEC 17 CERAB reloaded; updating to resume; current-awareness alerts (SDIs) affected

NEWS 13 DEC 17 THREE NEW FIELDS ADDED TO IFIPAT/IFIUDB/IFICDB

NEWS 14 DEC 30 EPFULL: New patent full text database to be available on STN

NEWS 15 DEC 30 CAPLUS - PATENT COVERAGE EXPANDED

NEWS 16 JAN 03 No connect-hour charges in EPFULL during January and February 2005

NEWS 17 FEB 25 CA/CAPLUS - Russian Agency for Patents and Trademarks (ROSPATENT) added to list of core patent offices covered

NEWS 18 FEB 10 STN Patent Forums to be held in March 2005

NEWS 19 FEB 16 STN User Update to be held in conjunction with the 229th ACS National Meeting on March 13, 2005

NEWS 20 FEB 28 PATDPAFULL - New display fields provide for legal status data from INPADOC

NEWS 21 FEB 28 BABS - Current-awareness alerts (SDIs) available

NEWS 22 FEB 28 MEDLINE/LMEDLINE reloaded

NEWS 23 MAR 02 GBFULL: New full-text patent database on STN

NEWS 24 MAR 03 REGISTRY/ZREGISTRY - Sequence annotations enhanced

NEWS 25 MAR 03 MEDLINE file segment of TOXCENTER reloaded

NEWS EXPRESS JANUARY 10 CURRENT WINDOWS VERSION IS V7.01a, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 10 JANUARY 2005

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FILE 'HOME' ENTERED AT 14:06:29 ON 09 MAR 2005

=> file registry COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.21 0.21

FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> Uploading C:\Program Files\Stnexp\Queries\Application queries\10715493d.str

```
chain nodes :
48 49 51 52 53 54
ring nodes :
         5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
1 2 3 4
24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44
45 46 47 50
chain bonds :
6-52 17-51 23-48 30-54 41-53 48-49 49-50
ring bonds :
                 3-4 4-5 4-6 6-7 7-8 7-9 8-11 9-10
1-2 1-5 1-23 2-3
                                                       10-11
                                                             11-24
                  14-15 15-16 15-17 17-18 18-19
                                                18-20
                                                      19-22
                                                             20-21
12-16 12-23 13-14
      25-26 25-29
                        26-27 27-28
22-24
                 25-47
                                    28-29
                                          28-30
                                                 30-31 31-32
                                                            31-33
                 36-37
                             36-47 37-38
33-34 34-35 35-50
                       36-40
                                          38-39
                                                 39-40 39-41
                                                            41-42
42-44 43-46 44-45
                 45-46 46-50
exact/norm bonds :
7-8 8-11 12-16 15-16 31-32 32-35 36-40 39-40
exact bonds :
6-52 17-51 23-48 30-54 41-53 48-49 49-50
normalized bonds :
                 3-4 4-5 4-6 6-7 7-9 9-10 10-11 11-24 12-13 12-23
1-2 1-5 1-23 2-3
                  17-18 18-19 18-20 19-22 20-21 21-22 22-24 25-26 25-29
13-14 14-15 15-17
                 28-29 28-30 30-31
25-47
      26-27 27-28
                                    31-33
                                          33-34
                                                34-35
                                                       35-50
                                                            36-37 36-47
37-38 38-39 39-41 41-42 42-43 42-44 43-46 44-45
                                                45-46 46-50
Match level:
```

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:Atom 43:Atom 44:Atom 45:Atom 46:Atom 47:Atom 48:CLASS 49:CLASS 50:Atom 51:CLASS 52:CLASS 53:CLASS 54:CLASS

STRUCTURE UPLOADED L1

=> que L1

QUE L1 L2

=> s 12 sss full FULL SEARCH INITIATED 14:07:08 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 1310 TO ITERATE

100.0% PROCESSED 1310 ITERATIONS

SEARCH TIME: 00.00.01

L3 2 SEA SSS FUL L1

=> d 13

L3 ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN

RN 320730-70-9 REGISTRY

CN Zinc, $[\mu 3-[5,15-bis[[10,20-bis(2-methoxy-2-methylpropyl)-21H,23H-porphin-5-yl-<math>\kappa$ N21, κ N22, κ N23, κ N24]ethynyl]-10,20-

bis(heptafluoropropyl)-21H,23H-porphinato(6-)
kN21,kN22,kN23,kN24]]tri- (9CI) (CA INDEX NAME)

MF C90 H70 F14 N12 O4 Zn3

CI CCS

SR CA

LC STN Files: CA, CAPLUS, CASREACT, USPATFULL

DT.CA CAplus document type: Journal; Patent

RL.P Roles from patents: RACT (Reactant or reagent)

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

PAGE 1-A

2 ANSWERS

PAGE 2-A

- 2 REFERENCES IN FILE CA (1907 TO DATE)
 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- => FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 163.17 163.38

FULL ESTIMATED COST

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=> SET TERMSET E#

SET COMMAND COMPLETED

=> DEL SEL Y

=> SEL L3 1 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L4 1 320730-70-9/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL USPATFULL

COST IN U.S. DOLLARS
SINCE FILE TOTAL
ENTRY SESSION
FULL ESTIMATED COST
0.51
163.89

FILE 'USPATFULL' ENTERED AT 14:07:25 ON 09 MAR 2005
CA INDEXING COPYRIGHT (C) 2005 AMERICAN CHEMICAL SOCIETY (ACS)

FILE COVERS 1971 TO PATENT PUBLICATION DATE: 8 Mar 2005 (20050308/PD)
FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)
HIGHEST GRANTED PATENT NUMBER: US6865747
HIGHEST APPLICATION PUBLICATION NUMBER: US2005050605
CA INDEXING IS CURRENT THROUGH 8 Mar 2005 (20050308/UPCA)
ISSUE CLASS FIELDS (/INCL) CURRENT THROUGH: 8 Mar 2005 (20050308/PD)
REVISED CLASS FIELDS (/NCL) LAST RELOADED: Feb 2005
USPTO MANUAL OF CLASSIFICATIONS THESAURUS ISSUE DATE: Feb 2005

USPAT2 is now available. USPATFULL contains full text of the <<< >>> original, i.e., the earliest published granted patents or <<< applications. USPAT2 contains full text of the latest US <<< >>> publications, starting in 2001, for the inventions covered in <<< >>> USPATFULL. A USPATFULL record contains not only the original <<< >>> >>> published document but also a list of any subsequent <<< >>> publications. The publication number, patent kind code, and <<< >>> publication date for all the US publications for an invention <<< >>> are displayed in the PI (Patent Information) field of USPATFULL <<< >>> records and may be searched in standard search fields, e.g., /PN, <<< <<< >>> /PK, etc.

>>> USPATFULL and USPAT2 can be accessed and searched together
>>> through the new cluster USPATALL. Type FILE USPATALL to
>>> enter this cluster.
>>>
>>> Use USPATALL when searching terms such as patent assignees,
>>> classifications, or claims, that may potentially change from
>>> the earliest to the latest publication.

This file contains CAS Registry Numbers for easy and accurate substance identification.

=> S L4

L5

=> DIS L5 1

ANSWER 1 OF 1 USPATFULL on STN

L5

2003:238763 USPATFULL AN ΤI Multielectron redox catalysts IN Therien, Michael J., Philadelphia, PA, UNITED STATES Fletcher, James T., San Diego, CA, UNITED STATES US 2003166921 A1 20030904 PΙ US 2002-301017 A1 20021121 (10) ΑI US 2001-331894P 20011121 (60) PRAI Utility DT APPLICATION FS LN.CNT 1788 INCLM: 540/145.000 INCL NCLM: 540/145.000 NCL IC [7] ICM: C07D487-22 CAS INDEXING IS AVAILABLE FOR THIS PATENT. => d 13 1-2 YOU HAVE REQUESTED DATA FROM FILE 'REGISTRY' - CONTINUE? (Y)/N:y ANSWER 1 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN L3 320730-70-9 REGISTRY RN Zinc, $[\mu 3-[5,15-bis[[10,20-bis(2-methoxy-2-methylpropyl)-21H,23H-methylpropyl)]$ CN porphin-5-yl-kN21, kN22, kN23, kN24] ethynyl]-10,20bis(heptafluoropropyl)-21H,23H-porphinato(6-)- κ N21, κ N22, κ N23, κ N24]]tri- (9CI) (CA INDEX NAME) C90 H70 F14 N12 O4 Zn3 MF CI CCS SR CA CA, CAPLUS, CASREACT, USPATFULL LC STN Files: DT.CA CAplus document type: Journal; Patent Roles from patents: RACT (Reactant or reagent) RL.P RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

PAGE 1-A

$$\begin{array}{c|c} & \text{Me} \\ & \text{C-Me} \\ & \text{OMe} \\ & \text{N-N-N-} \\ & \text{N-N-N-} \\ & \text{OMe} \\ & \text{CH}_2 - \text{C-Me} \\ & \text{Me} \\ & \text{Me} \\ \end{array}$$

PAGE 2-A

2 REFERENCES IN FILE CA (1907 TO DATE)
2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L3 ANSWER 2 OF 2 REGISTRY COPYRIGHT 2005 ACS on STN

RN 320730-66-3 REGISTRY

CN Zinc, $[\mu-[[5,5'-(1,2-ethynediyl)bis[10,20-bis(2-methoxy-2-methylpropyl)-21H,23H-porphinato-<math>\kappa$ N21, κ N22, κ N23, κ N24]](4-)]]di-(9CI) (CA INDEX NAME)

MF C62 H62 N8 O4 Zn2

CI CCS

SR CA

LC STN Files: CA, CAPLUS, CASREACT DT.CA CAplus document type: Journal

RL.NP Roles from non-patents: PREP (Preparation); RACT (Reactant or reagent)

- 1 REFERENCES IN FILE CA (1907 TO DATE) 1 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- => FIL REGISTRY

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 1.40 171.78

FULL ESTIMATED COST

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=> SET TERMSET E#

SET COMMAND COMPLETED

- => DEL SEL Y
- => SEL L3 2 RN

E1 THROUGH E1 ASSIGNED

=> S E1/RN

L6 1 320730-66-3/RN

=> SET TERMSET LOGIN

SET COMMAND COMPLETED

=> FIL CAPLUS

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 0.51 172.29

FULL ESTIMATED COST

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FILE COVERS 1907 - 9 Mar 2005 VOL 142 ISS 11 FILE LAST UPDATED: 8 Mar 2005 (20050308/ED)

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=> S L6

L7 1 L6

=> DIS L7 1

THE ESTIMATED COST FOR THIS REQUEST IS 1.10 U.S. DOLLARS DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:Y

- L7 ANSWER 1 OF 1 CAPLUS COPYRIGHT 2005 ACS on STN
- AN 2000:820312 CAPLUS
- DN 134:125155
- TI Transition-Metal-Mediated [2 + 2 + 2] Cycloaddition Reactions with Ethyne-Containing Porphyrin Templates: New Routes to Cofacial Porphyrin Structures and Facially-Functionalized (Porphinato)metal Species
- AU Fletcher, James T.; Therien, Michael J.
- CS Department of Chemistry, University of Pennsylvania, Philadelphia, PA, 19104-6323, USA
- SO Journal of the American Chemical Society (2000), 122(49), 12393-12394 CODEN: JACSAT; ISSN: 0002-7863
- PB American Chemical Society
- DT Journal
- LA English
- OS CASREACT 134:125155
- RE.CNT 60 THERE ARE 60 CITED REFERENCES AVAILABLE FOR THIS RECORD ALL CITATIONS AVAILABLE IN THE RE FORMAT

<---->User Break---->

=> file registry
COST IN U.S. DOLLARS

FULL ESTIMATED COST

SINCE FILE TOTAL ENTRY SESSION 7.40 179.69

FILE 'REGISTRY' ENTERED AT 14:16:48 ON 09 MAR 2005 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2005 American Chemical Society (ACS)

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TSCA INFORMATION NOW CURRENT THROUGH JANUARY 18, 2005

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Crossover limits have been increased. See HELP CROSSOVER for details.

Experimental and calculated property data are now available. For more information enter HELP PROP at an arrow prompt in the file or refer to the file summary sheet on the web at: http://www.cas.org/ONLINE/DBSS/registryss.html

=>Testing the current file.... screen

ENTER SCREEN EXPRESSION OR (END):end

=> Uploading C:\Program Files\Stnexp\Queries\Application queries\10715493e.str

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chain nodes :
48 49 50
           51
              52
                   53
                      54
                          55
                              56
                                  57
ring nodes
 2 3
              6
                    8
                      9
                         10
                             11
                                 12 13 14
                                            15
                                               16 17
                                                        18 19
                                                               20 21
               28
                      30
                          31
                              32
                                  33 34 35
                                             36 37 38 39 40
                                                               41
24 25 26
           27
                  29
45 46 47
           58
chain bonds :
6-53 17-52 23-48
                  30-55
                         41-54 48-49
                                       49-50
                                             50-51
                                                    51-56 56-57 57-58
ring bonds :
        1-23 2-3
                    3-4 4-5 4-6 6-7 7-8 7-9 8-11
                                                     9-10 10-11
                                                                  11-24
                                                                         12-13
1-2 1-5
                                                           19-22
12-16 12-23 13-14
                    14-15
                          15-16 15-17
                                       17-18
                                             18-19
                                                     18-20
                                                                  20-21
                                                                         21-22
             25-29
                    25-47
                          26-27
                                 27-28
                                        28-29
                                              28-30
                                                     30-31
                                                           31-32
                                                                  31-33
                                                                         32-35
33-34
      34-35
             35-58
                    36-37
                          36~40
                                 36-47
                                        37-38 38-39
                                                     39-40
                                                           39-41
                                                                  41-42
42-44
     43-46
             44-45
                    45-46
                          46-58
```

exact/norm bonds :

7-8 8-11 12-16 15-16 31-32 32-35 36-40 39-40

exact bonds :

6-53 17-52 23-48 30-55 41-54 48-49 49-50 50-51 51-56 56-57 57-58

normalized bonds :

1-2 1-5 1-23 2-3 3-4 4-5 4-6 6-7 7-9 9-10 10-11 11-24 12-13 12-23

 $13-14 \quad 14-15 \quad 15-17 \quad 17-18 \quad 18-19 \quad 18-20 \quad 19-22 \quad 20-21 \quad 21-22 \quad 22-24 \quad 25-26 \quad 25-29$ 25-47 26-27 27-28 28-29 28-30 30-31 31-33 33-34 34-35 35-58 36-37 36-47 37-38 38-39 39-41 41-42 42-43 42-44 43-46 44-45 45-46 46-58

Match level :

1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom 11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom 20:Atom 21:Atom 22:Atom 23:Atom 24:Atom 25:Atom 26:Atom 27:Atom 28:Atom 29:Atom 30:Atom 31:Atom 32:Atom 33:Atom 34:Atom 35:Atom 36:Atom 37:Atom 38:Atom 39:Atom 40:Atom 41:Atom 42:Atom 43:Atom 44:Atom 45:Atom 47:Atom 48:CLASS 49:CLASS 50:CLASS 51:CLASS 52:CLASS 53:CLASS 54:CLASS

L8STRUCTURE UPLOADED

=> que L8

L9 QUE L8

=> s 19 sss full FULL SEARCH INITIATED 14:17:18 FILE 'REGISTRY' FULL SCREEN SEARCH COMPLETED - 426 TO ITERATE

100.0% PROCESSED 426 ITERATIONS SEARCH TIME: 00.00.01

0 ANSWERS

O SEA SSS FUL L8 L10

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